REMARKS

As an initial matter, the Applicant thanks the Examiner for his thorough review of the present application. Currently, claims 15 – 28 are pending. In the office action, the Examiner has objected to the drawings as reference number 16 should be directed to the 'axle' not the 'axis.' The Examiner has also objected to claim 22 as containing a minor informality. Finally, the Examiner has rejected claim 22 under §112, 1st paragraph and claims 15-28 under §103 in view of patents Mobes, Earll and Bottril. In response, the Applicant has submitted new drawings, amended the claims, and presented arguments that it believes overcome the Examiner's objections and rejections. Based on the foregoing, the Applicant respectfully requests reconsideration.

Drawing Objection

The Applicant submits replacement Figures 1 and 4 in which reference number 16 correctly points to the axle and not the axis.

Claim Objections

As suggested, the Applicant has amended claim 22 to change "collectors" to "collector brushes." No new matter was entered and the amendment was made for clarification purposes only.

Claim Rejections §112

The Examiner has rejected claim 22 under §112, 1st paragraph stating that the term "slip ring unit" is not described in such a way as to enable one skilled in the art to make and/or use the invention. Slip rings, however, are quite well known in the art of cable drums. More specifically, slip rings are known devices that are used to make electrical connections to an electrical cable on a rotating cable drum. Indeed, slip rings are so well known that they are defined in wikipedia, (http://en.wikipedia.org/wiki/Slip_ring). An excerpt of the wikipedia entry is as follows:

> "A **slip ring** (in electrical engineering terms) is a method of making an electrical connection through a rotating assembly. Slip rings, also called rotary electrical

interfaces, rotating electrical connectors, collectors, swivels or electrical rotary joints, are commonly found in electrical generators for AC systems and alternators and in packaging machinery, cable reels, wind turbines.

A slip ring consists of a conductive circle or band mounted on a shaft and insulated from it. Electrical connections from the rotating part of the system, such as the rotor of a generator, are made to the ring. Fixed contacts or brushes run in contact with the ring, transferring electrical power or signals to the exterior, static part of the system."

In addition to a wikipedia entry, a Google search reveals literally hundreds of sites that define and/or sell slip rings. Finally, the Applicant notes that the Examiner, as one of ordinary skill in the art, understood the term well enough to assert that Mobes anticipates the pending claims as it includes, among other things, a slip ring. As such, Applicant believes that one of ordinary skill in the art of cable drums would not require any additional information or explanation to make and/or use the invention.

Claim Rejections – 35 U.S.C. §§ 102 and 103

The Examiner has rejected claims 15 – 22, 27 and 28 under 102(b) or, in the alternative, under 103(a) in view of Mobes (EP-0802601). Applicant believes it has traversed the rejections and requests reconsideration in light of the arguments presented below.

According to the MPEP, for anticipation under §102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. See MPEP §706.02. Any feature not directly taught must be inherently present. Id. Further, to establish a *prima facie* case of obviousness of a claimed invention under §103, all the claim limitations must be taught or otherwise suggested by the prior art. (See MPEP 2143.03). Here, Mobes does not teach or suggest every aspect of the pending claims.

In particular, claim 15 recites a separate axle that can be inserted into an empty axle channel of a preassembled drum core from either side of the core. Moreover, a spring anchor hub is held in a substantially axial way within the axle channel by a spiral spring. This configuration facilitates a form-fit rotary coupling between the spring anchor hub and an axle when the axle is inserted into the axle channel.

As will be readily appreciated, this configuration is an important aspect of the present invention allows one to change the unwinding direction of the cable drum by simply turning 180° the whole pre-assembled drum core, without having to open the pre-assembled drum core and to dismount and remount the spiral spring and the spring anchor hub.

Mobes does not teach or suggest, *inter alia*, a preassembled drum core having an axle channel that contains a spring anchor hub and a spiral spring but no axle. Indeed, Mobes discloses a spring cable reel 1, a drum cassette 9 (which includes a drum driving spring) and a spring nut 8 that are *not* part of any preassembled unit similar to the inventive pre-assembled drum core as defined in claim 15, i.e., *"a pre-assembled drum core having a housing which forms a winding surface for the cable and which contains at least one spiral spring and at least one spring anchor hub, said pre-assembled drum core having an axel channel passing right through it with no axle, and said spring anchor hub being in a substantially axial way within said axle channel by said spiral spring."*

As clearly seen on Fig. 2 or 3, the only portion of Mobes' that could be possibly considered "pre-assembled" consists of:

- the casing 2, which forms a winding surface for the cable;
- the lateral drum shield 4;
- the so-called coupling 5, with slip ring bodies 6; and
- the common axle 7, which is part of the coupling 5 and extends axially through the casing 2.

As such, the common axle 7 of Mobes is an integral part the pre-assembled unit, and that the drum cassette 9 with its spring and the anchor hub 8 are *separate* components that are slid onto the common axle 7 of the preassembled unit (see Mobes, Fig. 2 or 3). This is significant in that changing the unwinding direction is a complicated procedure requiring removal and repositioning of the spring cassette 9, spring nut 8 and the adjusting ring 11 about the common axle. See Mobes, translation page 3-4. Again, the simple solution for changing unwinding direction accomplished by the inventive cable drum as claimed is neither taught nor suggested by Mobes.

Mobes actually teaches away from the existence of the inventive solution for changing the unwinding direction of a spring-driven cable drum. Indeed, Möbes teaches the following procedure for changing the unwinding direction of its spring-driven cable drum (see English translation of EP-0802601, page 3, last paragraph, and page 4, first paragraph):

> "In case a change in unwinding direction from left to right is desired, the flange 10 is loosened, the left drum shield 3 is withdrawn with bearing, the spring cassette 9 and the spring nut 8 are removed, and even adjusting ring 11. After that, spring cassette 9, spring nut 8 and the adjusting ring 11 are turned about 180° and are slid on the common axle 7 again in the reverse sequence. Then, the left drum shield 3 with bearing and the flange 10 are mounted and the arrangement takes over the position 1' shown in Figure 4. The unwinding direction is to the right in this position."

It should be appreciated that Mobes' complicated method for changing the unwinding direction of a cable drum would never suggest to a person skilled in the art that it might be possible to design a construction kit for a cable drum with which the unwinding direction can be easily changed, without having to dismount/remount a spiral and/or spring anchor hub.

Claims 16-28 all depend from claim 15 and are believed allowable for the above-cited reasons.

The Examiner has also rejected claims 23-25 as being unpatentable in view of Mobes in further view of Earll, (U.S. Pat. No. 1,941,880). As stated, Mobes does not teach or suggest multiple limitations of claims 15-28. Earll adds nothing to the teachings of Mobes with respect to the missing limitations.

Finally, the Examiner rejects claim 26 as being unpatentable in view of Mobes in further view of Earll and Bottrill et al. (U.S. Pat. No. 4,123,013). Again, as stated above, Mobes does not teach or suggest multiple limitations of claims 15-28. Neither Earll nor Bottrill et al. add to the teachings of Mobes with respect to the missing limitations.

No fee is considered due for filing this Amendment. However, authorization is hereby given to charge our Deposit Account No. 13-0235 in the event any additional fees are owed.

Respectfully submitted,

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